



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/871,600	05/31/2001	Akira Arai	9319A-000222	8588

27572 7590 03/11/2003

HARNESS, DICKEY & PIERCE, P.L.C.
P.O. BOX 828
BLOOMFIELD HILLS, MI 48303

EXAMINER

SHEEHAN, JOHN P

ART UNIT	PAPER NUMBER
----------	--------------

1742

DATE MAILED: 03/11/2003

//

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/871,600

Applicant(s)

ARAI ET AL.

Examiner

John P. Sheehan

Art Unit

1742

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 December 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10, 12-14, 24-30 and 32-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10, 12-14, 24-30 and 32-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

Art Unit: 1742

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 to ^{8, 10, 12, 13, 24-28, 30, 32-34} 10, 12 to 14, 24 to 30 and 32 to 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over each of Panchanathan (Panchanathan, US Patent No. 5,72,792) or Mohri et al. (Mohri, US Patent No. 4,765,848).

Each of the references teaches a magnetic powder having a composition that overlaps the alloy composition recited in the instant claims (Panchanathan, column 1, lines 37 to 50 and Mohri, column 3, lines 30 to 42 and column 5, lines 5 to 30). Each of these references also teaches a process of making the disclosed magnetic powder that is similar to the process disclosed in the instant application (Panchanathan, column 2, lines 1-21 and Mohri, column 5, lines 45 to 50). Panchanathan teaches the presence of a hard and soft magnetic phase (column 1, lines 50 to 57).

The claims and the references differ in that the references do not teach the exact same alloy composition, are silent with respect to the claimed magnetic properties nor do the references teach the all the process limitations recited in the dependent claims.

Art Unit: 1742

However, one of ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because the powder alloys taught by the references have compositions that overlap the alloy powder composition recited in the instant claims and therefore are considered to establish a prima facie case of obviousness, In re Malagari, 182 USPQ 549 and MPEP 2144.05. Further, in view of the fact that the alloys taught by Panchanathan and Mohri are made by a process which is similar to, if not the same as, applicants' process of making the instantly claimed alloy, the alloys taught by Panchanathan and Mohri would be expected to possess all the same properties as recited in the instant claims, In re Best, 195 USPQ, 430 and MPEP 2112.01.

“Where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a prima facie case of either anticipation or obviousness has been established, In re Best, 195 USPQ 430, 433 (CCPA 1977). ‘When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not.’ In re Spada, 15 USPQ2d 655, 1658 (Fed. Cir. 1990). Therefore, the prima facie case can be rebutted by evidence showing that the prior art products do not necessarily possess the characteristics of the claimed product. In re Best, 195 USPQ 430, 433 (CCPA 1977).” (emphasis added by the Examiner), see MPEP 2112.01.

With respect to the process limitations recited in the instant claims it is the Examiner's position that the process limitations recited in the instant product by process claims do not necessarily lend patentability to the claimed product, MPEP 2113.

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed.

Art Unit: 1742

Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1 to 10, 12 to 14, 24 to 30 and 32 to 34 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 to 14 and 23 to 33 of copending Application No. 09/875,789. Although the conflicting claims are not identical, they are not patentably distinct from each other because the alloy compositions recited in these two sets of claims are exactly the same. The only difference in these two sets of claims is a difference in the claimed magnetic properties.

However, one of ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because the alloys compositions in the two sets of claims are exactly the same and are made by the same process. In view of this, the claimed alloys would be expected to possess all the same properties, *In re Best*, 195 USPQ, 430 and MPEP 2112.01.

“Where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a prima facie case of either anticipation or obviousness has been established, *In re Best*, 195 USPQ 430, 433 (CCPA 1977). ‘When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not.’ *In re Spada*, 15 USPQ2d 655, 1658 (Fed. Cir. 1990). Therefore, the prima facie case can be rebutted by evidence showing that the prior art products do not necessarily possess the characteristics of the claimed product. *In re Best*, 195 USPQ 430, 433 (CCPA 1977).” see MPEP 2112.01.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

3. Claims 1 to 10, 12 to 14, 24 to 30 and 32 to 34 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 to 13 and 16 to 22 of copending Application No. 09/863,072. Although the conflicting claims are not identical, they are not patentably distinct from each other because the alloy compositions recited in each of these applications overlap when M is Dy in the instant set of claims.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

4. Claims 1 to 10, 12 to 14, 24 to 30 and 32 to 34 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 to 12 and 18 of copending Application No. 09/754,823 and claims 1 to 10 and 14 of copending Application No. 09/754,463. Although the conflicting claims are not identical, they are not patentably distinct from each other because the alloy compositions recited in each of these applications overlap when M is Nb in the instant set of claims..

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Response to Arguments

5. Applicant's arguments filed December 20, 2002 have been fully considered but they are not persuasive.

Panchanathan

Applicants argue that in the examples Panchanathan teaches a coercive force of 5.02 kOe (399.9kA/m) for a bonded magnet (Panchanathan, column 3, line 35) whereas in contrast the instant claims require the bonded magnet made from the claimed alloy powder to have a coercive force of 400 to 750 kA/m. The Examiner is not persuaded. The difference between the coercive force of 399.5 kA/m for the bonded magnet taught by Panchanathan and applicants' claimed lower limit of 400kA/m for a bonded magnet made of the claimed alloy powder is about 0.125 % and is so small that it does not constitute a patentable distinction. This small difference could be the result of experimental error. Further, the coercive force recited in the applicants' claims is not the coercive force of the claimed magnetic powder but rather is the coercive force of a bonded magnet made from the claimed powder. The properties of the bonded magnet made from applicants' claimed powder would be expected to be a function of the process used to make the bonded magnet, such as for example, the amount of binder used. In view of this, the coercive force recited in the instant claims is not considered to distinguish the claimed alloy powder from Panchanathan's powder.

Applicants argue that the alloy proportions taught by Panchanathan are outside the range recited in the instant claims. The Examiner is not persuaded. In making any comparison between the proportions taught by Panchanathan and the proportions recited in the instant claims it should first be noted that the proportions in the instant claims are based on atomic percent whereas Panchanathan's proportions are based on weight percent (Panchanathan, column 1, lines 36 and 37). Thus, a direct comparison

Art Unit: 1742

between Panchanathan's proportions and the instantly claimed proportions is not proper. However, taking Panchanathan's Example N in column 3 and assuming that the atomic weight of the rare earth component is 144, Panchanathan's Example N in atomic percent becomes;

Rare earth	7.6 atomic %
Boron	5.9 atomic %
Niobium	1.2 atomic % and
Iron	the balance.

These proportions for Panchanathan's Example N are completely encompassed by the instant claims and it is emphasized that Example N has a coercivity of 399.5 kA/m that closely approximates applicants' claimed lower limit of 400 kA/m.

Mohri

Applicants argue that while the rare earth alloy proportion taught by Mohri overlaps the rare earth component recited in applicants' claims each of Mohri's example alloys teaches the use of 17 atomic % rare earth which is much more than applicants claimed range of 7.1 to 9.9 atomic %. The Examiner is not persuaded. The teachings of a reference are not limited to merely that which is set forth in the examples. Instead "[a] reference may be relied upon for all that it would have reasonably suggested to one having ordinary skill in the art", MPEP 2123. In this case, Mohri teaches proportions, which overlap the instantly claimed proportions, and as set forth in the statement of the rejection such a teaching establishes a prima facie case of obviousness.

Art Unit: 1742

Applicants argue that dependent claim 9 “calls for R to be comprised of rare earth elements containing Nd and/or Pr”, that Mohri requires the use of La and Ce and one of skill in the art would not be motivated to use a rare earth component containing mainly Pr and/or Nd. The Examiner is not persuaded. In view of the use of the open terms “comprises” and “containing” in the phrase, “R comprises rare-earth elements containing Nd and/or Pr” (claim 9, lines 1 and 2) claim 9 is not restricted to Nd and/or Pr but rather is open to the inclusion of any other rare earths including La and Ce taught by Mohri. Further, there is not language in claim 9 that requires that the rare earth component is mainly Pr and/or Nd. Finally, in addition to La and Ce, Mohri teaches the use of any of the rare earths including Nd and/or Pr (column 3, line 40 and the example alloys appearing Mohri’s Tables).

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

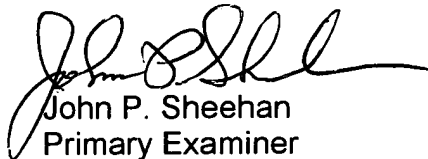
Art Unit: 1742

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John P. Sheehan whose telephone number is (703) 308-3861. The examiner can normally be reached on T-F (6:30-5:00) Second Monday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (703) 308-1146. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0651.


John P. Sheehan
Primary Examiner
Art Unit 1742

jps
March 5, 2003